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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,133	07/29/2003	Neeraj Agrawal	JP920030083	6937

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EXAMINER	
GORTAYO, DANGELINO N	

ART UNIT	PAPER NUMBER
2168	

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/629,133	AGRAWAL ET AL.
	Examiner	Art Unit
	Dangelino N. Gortayo	2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 23-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 23-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20, 23-32 are pending.

2. This Office Action is a response to Applicant's Amendment filed 5/30/2006.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-20, 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Hattori et al. ("Hattori" US# 6,889,223 B2) in view of Cruz et al. ("Measuring Structural Similarity Among Web Documents: Preliminary Results"; Cruz et al. 1998; Lecture Notes in Computer Science. volume 1375. page 513.) and further in view of Schuetze et al. ("Schuetze" US# 6,598,054 B2).

As per claim 1, Hattori teaches "A method for determining a degree of similarity between documents in a given document collection," (see Abstract) "modeling all said documents as labeled tree representations;" (column 8 lines 33-39, wherein the structured document database is expressed in a tree structure, called a document object tree, for the structured documents) "building a computerized dictionary of path representations relating to paths that occur in said documents" (column 7 lines 50-61,

wherein the tree is formed of nodes corresponding to document structure) “storing, for at least two said documents, labeled tree representations of respective documents;” (Figures 4-8 and column 8 lines 29-41, wherein the document storage is a structured document database that stores labeled, hierarchal tree structures of documents) “storing, for said at least two said documents, said path representations relating to said paths that occur in said documents from root nodes to leaf nodes in said labeled tree representations of said respective documents;” (Figure 9 and column 9 lines 24-36, wherein an index storage contains a structure index that has path representation information relating to paths that occur in documents according to a tree representation) “calculating a measure of similarity” (column 34 line 63 – column 35 line 37, wherein similarity values are calculated for documents based on nodes) “and using said measure of similarity to cluster a plurality of documents comprising similar information, wherein said documents comprise any of web page documents and eXtensible Markup Language (XML) documents, wherein two documents that differ only in the frequency of occurrence of the paths associated with said two documents are considered to be more similar to eachother than two documents that differ in the occurrence of paths.” (column 30 lines 36-54, wherein a similar object retrieval query retrieves documents with similar object ranges, based on values of similarity).

Hattori does not expressly disclose “representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in said documents and a frequency of

occurrence of said particular path in said documents". Schuetze teaches "representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in said documents and a frequency of occurrence of said particular path in said documents;" (Figure 3 and column 10 lines 57-64, wherein a feature vector is made from the document). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure with Schuetze's method of representing a document into vectors. This gives the user another way to represent documents in a datastore. The motivation for doing so would be to be able to refine and adjust query searches using vector representation (Schuetze column 5 lines 32-38).

Hattori and Schuetze do not expressly disclose "calculating a measure of similarity between two of the documents based upon the frequency of occurrence of similar paths specified by the path representations". However, Cruz teaches "calculating a measure of similarity between two of the documents based upon the frequency of occurrence of similar paths specified by the path representations;"(Page 9 paragraphs 3-5, wherein a measure of similarity between two documents is measures through the difference between the two documents, as well as their similarities, and is analogous). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure and Schuetze's method of representing a document into vectors with Cruz's method of

calculating the similarity between two documents. This gives the user an additional source of information when organizing and querying databases holding documents. The motivation for doing so would be to provide a user with a complementary source of information in automated search and classification methods and systems (Cruz page 2 lines 7-15)

As per claim 2, Hattori teaches "the tree representation is a Document Object Model representation." (column 7 lines 62-64, wherein the tree structure of the document is a document object tree model).

As per claim 3, Hattori teaches "the step of generating a path representation for a path of a document as a sequence of labels representative from a root node to a leaf node in the labeled tree representation of the document." (column 8 line 66 – column 9 line 16, wherein a sequence of labels representative of the tree representation are stored in a structure index using a structure document pass step).

As per claim 4, Hattori teaches "the step of storing, as path representations, sets of sequenced labels representative of distinct paths in a labeled tree representation of a corresponding document." (column 9 lines 17-36, wherein structure index information is stored in an index storage that represent distinct paths in a labeled tree representation of a document).

As per claim 5, Hattori teaches "the step of storing a path dictionary (Dict.sub.paths=[p.sub.1, p.sub.2, . . . , p.sub.N]) of distinct paths collated from a tree representation for a document." (column 12 lines 29-45, wherein a schema is made hat shows the distinct paths of a document from a tree representation and is analogous).

As per claim 6, Hattori teaches "the step of eliminating selected paths from the path dictionary (Dict.sub.paths)." (column 29 lines 27-35, wherein a structure evolving device generates a bind table that eliminates selected paths).

As per claim 7, Hattori teaches "paths that occur highly frequently or highly infrequently are eliminated from the path dictionary (Dict.sub.paths)." (column 29 lines 40-56, wherein an upper location and lower location evolving device is used by the structure evolving device to choose paths to eliminate to make a bind table showing paths and similarity).

As per claim 8, Hattori teaches "the step of computing the frequency of occurrence (f.sub.j(p.sub.i)) of a path (p.sub.i) in a document (d.sub.j)." (column 33 lines 33-55, wherein path frequence is found based on tree level and the bind table).

As per claim 9, Hattori teaches "the step of computing the maximum number of instances (f.sub.max=max.sub.ij f.sub.j(p.sub.i)) in which a path (p.sub.i) in the document (d.sub.j) occurs." (column 34 lines 1-19, wherein a final bind table aggregates the number of times a path occurs in the document through a structure evolving device).

As per claim 10, Hattori teaches "the step of storing a representation of the document (d.sub.j) as a N-dimensional vector ([d.sub.j1, d.sub.j2, . . . , d.sub.jN], where d.sub.jk=f.sub.j(p.sub.k)/f.sub.max, 1 < k < N) of relative frequencies of occurrence (f.sub.j(p.sub.k)) of paths (p.sub.k) in the document (d.sub.j)." (Figure 9 and column 9 lines 26-36, wherein the structure index stores information in a vectore showing node paths traveled and is analogous).

As per claim 11, Hattori teaches "the step of computing the minimum number of instances (f.sub.min=min.sub.ij f.sub.j(p.sub.i)) in which a path (p.sub.i) in the document (d.sub.j) occurs." (column 34 lines 1-19, wherein a final bind table is made using lower location evolving and is synonymous).

As per claim 12, Hattori teaches "the step of computing the similarity between a pair of documents (d.sub.i, d.sub.l) as a function (sim(d.sub.i, d.sub.l)) of metrics relating the number of paths common to the respective documents (d.sub.i, d.sub.l)." (column 38 line 47 – column 39 line 11, wherein a similarity value is computed using path information from the structure of documents).

As per claim 13, the limitations are disclosed as per claim 12 above. Additionally, Schuetze teaches "the function for computing the similarity between a pair of documents (di, dl) ... is the quotient of a numerator, defined as the sum for all paths (k=1 . . . N) of the minimum number of instances (min(dik, dlk)) in which paths occur in the respective documents (di, dl), and a denominator, defined as the sum for all paths (k=1 . . . N) of the maximum number of instances (min(dik, dlk)) in which paths occur in the respective documents (di, dl)." (column 13 lines 13-28 and column 16 line 1-5, wherein the exact formula is used to show similarities between two documents, with d1 and d2 being two separate documents being compared).

As per claim 14, Hattori teaches "the tree representation of a document includes a positional index, which represents, for a node (n), the number of previous sibling nodes with the same label as that of node (n)." (column 8 lines 42-57, wherein the tree representation includes an object ID including linking information).

As per claim 15, Hattori teaches "the step of storing as a path representation a set that defines positional information of sibling nodes under a parent node." (column 8 lines 58-65, wherein within the structure index is positional information of sibling nodes under parent nodes).

As per claim 16, Hattori teaches "the step of storing precise path representations that precisely define a document structure, and generalised path representations that partially generalise structural aspects of precise path representations of a document." (Figure23 and column.4 line 1-3, wherein the schema that forms the bind table precisely defines the document structure and path representations).

As per claim 17, Hattori teaches "the step of calculating the measure of similarity involves determining a total number of precise path representations of one document that are either shared by the other document, or are a subsumed subset of at least one of the generalised path representations of the other document." (column 38 lines 29-43, wherein the measure of similarity needs the path representation of documents to be calculated).

As per claim 18, Hattori teaches "the step of normalising the measure of similarity by a term that represents the number of unique path representations shared by the two documents." (column 38 lines 29-34, wherein the measure of similarity is found using the number of levels to have a standard for documents and a similarity value is found).

As per claim 19, Hattori teaches "the number of unique path representations is calculated by adding the number of path representations for each document, and subtracting from this total the number path representations shared by the two

documents." (column 39 lines 29-55, wherein the structure components of a document are used to aggregate the number of paths and is compared to a target document's structure components).

As per claim 20, Hattori teaches "the step of storing as a path representation a sequence of terms separated by a delimiting symbol, in which each term is represented by a label and a parenthesised predicate that specifies the positional index of the term either specifically or generally." (column 18 lines 30-43 and column 24 lines 45-60, wherein the path representation is shown from the structure of the document and is stored, including level ID, to show a positional index).

As per claim 23, Hattori teaches "A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method for determining a degree of similarity between documents in a given document collection," (see Abstract and column 40 lines 30-35) "modeling all said documents as labeled tree representations;" (column 8 lines 33-39, wherein the structured document database is expressed in a tree structure, called a document object tree, for the structured documents) "building a computerized dictionary of path representations relating to paths that occur in said documents" (column 7 lines 50-61, wherein the tree is formed of nodes corresponding to document structure) "storing, for at least two said documents, said labeled tree representations of respective documents;" (Figures 4-8 and column 8 lines 29-41, wherein the document storage is a structured document database that stores labeled, hierarchal tree structures of

documents) "storing, for said at least two said documents, said path representations relating to said paths that occur in said documents from root nodes to leaf nodes in said labeled tree representations of said respective documents;" (Figure 9 and column 9 lines 24-36, wherein an index storage contains a structure index that has path representation information relating to paths that occur in documents according to a tree representation) "and calculating a measure of similarity" (column 34 line 63 – column 35 line 37, wherein similarity values are calculated for documents based on nodes). "and using said measure of similarity to cluster a plurality of documents comprising similar information, wherein said documents comprise any of web page documents and eXtensible Markup Language (XML) documents, wherein two documents that differ only in the frequency of occurrence of the paths associated with said two documents are considered to be more similar to eachother than two documents that differ in the occurrence of paths." (column 30 lines 36-54, wherein a similar object retrieval query retrieves documents with similar object ranges, based on values of similarity)

Hattori does not expressly disclose "representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in said documents and a frequency of occurrence of said particular path in said documents". Schuetze teaches "representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in

said documents and a frequency of occurrence of said particular path in said documents;" (Figure 3 and column 10 lines 57-64, wherein a feature vector is made from the document). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure with Schuetze's method of representing a document into vectors. This gives the user another way to represent documents in a datastore. The motivation for doing so would be to be able to refine and adjust query searches using vector representation (Schuetze column 5 lines 32-38)

Hattori and Schuetze do not expressly disclose "calculating a measure of similarity between two of the documents based upon the frequency of occurrence of similar paths specified by the path representations". However, Cruz teaches "calculating a measure of similarity between two of the documents based upon the frequency of occurrence of similar paths specified by the path representations;"(Page 9 paragraphs 3-5, wherein a measure of similarity between two documents is measures through the difference between the two documents, as well as their similarities, and is analogous). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure and Schuetze's method of representing a document into vectors with Cruz's method of calculating the similarity between two documents. This gives the user an additional source of information when organizing and querying databases holding documents. The motivation for doing so would be to provide a user with a complementary source of

information in automated search and classification methods and systems (Cruz page 2 lines 7-15)

As per claim 24, Hattori teaches “the tree representation is a Document Object Model representation.” (column 7 lines 62-64, wherein the tree structure of the document is a document object tree model).

As per claim 25, Hattori teaches “the step of generating a path representation for a path of a document as a sequence of labels representative from a root node to a leaf node in the labeled tree representation of the document.” (column 8 line 66 – column 9 line 16, wherein a sequence of labels representative of the tree representation are stored in a structure index using a structure document pass step).

As per claim 26, Hattori teaches “the step of storing, as path representations, sets of sequenced labels representative of distinct paths in a labeled tree representation of a corresponding document.” (column 9 lines 17-36, wherein structure index information is stored in an index storage that represent distinct paths in a labeled tree representation of a document).

As per claim 27, Hattori teaches “the tree representation of a document includes a positional index, which represents, for a node (n), the number of previous sibling nodes with the same label as that of node (n).” (column 8 lines 42-57, wherein the tree representation includes an object ID including linking information).

As per claim 28, Hattori teaches “A computer system operable for determining a degree of similarity between documents in a given document collection,” (see Abstract)

"means for modeling all said documents as labeled tree representations;" (column 8 lines 33-39, wherein the structured document database is expressed in a tree structure, called a document object tree, for the structured documents) "means for building a computerized dictionary of path representations relating to paths that occur in said documents" (column 7 lines 50-61, wherein the tree is formed of nodes corresponding to document structure) "means for storing, for at least two said documents, said labeled tree representations of respective documents;" (Figures 4-8 and column 8 lines 29-41, wherein the document storage is a structured document database that stores labeled, hierarchal tree structures of documents) "means for storing, for said at least two said documents, said path representations relating to said paths that occur in said documents from root nodes to leaf nodes in said labeled tree representations of said respective documents;" (Figure 9 and column 9 lines 24-36, wherein an index storage contains a structure index that has path representation information relating to paths that occur in documents according to a tree representation) "means for calculating a measure of similarity" (column 34 line 63 – column 35 line 37, wherein similarity values are calculated for documents based on nodes). "and means for using said measure of similarity to cluster a plurality of documents comprising similar information, wherein said documents comprise any of web page documents and eXtensible Markup Language (XML) documents, wherein two documents that differ only in the frequency of occurrence of the paths associated with said two documents are considered to be more similar to eachother than two documents that differ in the occurrence of paths." (column

30 lines 36-54, wherein a similar object retrieval query retrieves documents with similar object ranges, based on values of similarity)

Hattori does not expressly disclose "representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in said documents and a frequency of occurrence of said particular path in said documents". Schuetze teaches "representing each of said documents in said document collection as an N-dimensional vector comprising an element I denoting a value of a feature associated with a particular path, wherein said feature comprises any of a presence or absence of said particular path in said documents and a frequency of occurrence of said particular path in said documents;" (Figure 3 and column 10 lines 57-64, wherein a feature vector is made from the document). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure with Schuetze's method of representing a document into vectors. This gives the user another way to represent documents in a datastore. The motivation for doing so would be to be able to refine and adjust query searches using vector representation (Schuetze column 5 lines 32-38)

Hattori and Schuetze do not expressly disclose "calculating a measure of similarity between two of the documents based upon the frequency of occurrence of similar paths specified by the path representations". However, Cruz teaches "calculating a measure of similarity between two of the documents based upon the frequency of

occurrence of similar paths specified by the path representations;"(Page 9 paragraphs 3-5, wherein a measure of similarity between two documents is measures through the difference between the two documents, as well as their similarities, and is analogous). It would have been obvious at the time of the invention for one of ordinary skill in the art to combine Hattori's method of comparing documents based on their structure and Schuetze's method of representing a document into vectors with Cruz's method of calculating the similarity between two documents. This gives the user an additional source of information when organizing and querying databases holding documents. The motivation for doing so would be to provide a user with a complementary source of information in automated search and classification methods and systems (Cruz page 2 lines 7-15)

As per claim 29, Hattori teaches "said representations is a Document Object Model representation." (column 7 lines 62-64, wherein the tree structure of the document is a document object tree model).

As per claim 30, Hattori teaches "means for generating a path representation for a path of a document as a sequence of labels representative from a root node to a leaf node in the labeled tree representation of the document." (column 8 line 66 – column 9 line 16, wherein a sequence of labels representative of the tree representation are stored in a structure index using a structure document pass step).

As per claim 31, Hattori teaches "means for storing, as path representations, sets of sequenced labels representative of distinct paths in a labeled tree representation of a corresponding document." (column 9 lines 17-36, wherein structure index information is

stored in an index storage that represent distinct paths in a labeled tree representation of a document).

As per claim 32, Hattori teaches "the tree representation of a document includes a positional index, which represents, for a node (n), the number of previous sibling nodes with the same label as that of node (n)." (column 8 lines 42-57, wherein the tree representation includes an object ID including linking information).

Response to Arguments

5. Applicant's arguments, see page 12, filed 5/30/2006, with respect to the claim objection regarding the numbering of claims 27-32 have been fully considered and are persuasive. The objection to the claim numbering has been withdrawn.

6. Applicant's arguments, see page 12, filed 5/30/2006, with respect to the Double Patenting rejection of claims 1-20 and 23-32 have been fully considered and are persuasive. The Double Patenting rejection has been withdrawn.

7. Applicant's arguments, see page 13, filed 5/30/2006, with respect to the rejection of claims 1-20 and 23-32 in regards to 35 USC 101 have been fully considered and are persuasive. The rejection in regards to USC 101 has been withdrawn.

8. Applicant's arguments, see page 14, filed 5/30/2006, with respect to the rejection of claims 1-20 and 23-32 in regards to 35 USC 112, second paragraph have been fully considered and are persuasive. The rejection in regards to USC 112, 2nd has been withdrawn.

9. Applicant's arguments, see page 15, filed 5/30/2006, with respect to the rejection of claims 1-20 and 23-32 in regards to 35 USC 103 have been fully considered but they are not persuasive.

a. Applicant's argument stated as "the claimed invention, as provided in amended independent claims 1, 23, and 28 contain features, which are patentably distinguishable from the prior art reference of record"

In response to the argument, examiner rejects the amendments made to the independent claims using the previously utilized prior art of reference, as can be seen in the USC 103 rejection of claims 1, 23, and 28 above.

b. Applicant's argument stated as "In the present application, the reason given to support the proposed combination is improper, and is not sufficient to selectively and gratuitously substitute parts of one reference for a part of another reference in order to meet, but failing nonetheless, the Appellants' novel claimed invention. Moreover, there is nothing in the prior art references themselves, namely Hattori, Cruz, and Schuetze, which suggests a motivation to combine elements from each reference"

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Hattori is directed to a method of document retrieval from a collection of structured document based on structure data, Schuetze is directed to a method of document retrieval and recommendation, representing documents as feature vectors to determine similarity, and Cruz is directed to a method of document searching by measuring the structural similarity among the stored documents. The three references are concerned with the solution to the problem of document retrieval based on document components and structure data, finding a similarity between documents. Consequently, the ordinary skilled artisan would have been motivated to combine the references since Schuetze and Cruz's teaching would enable the user of Hattori's system to find structural similarity between documents in document storage in a more efficient way, finding the similarity faster and representing the data in another format to refine and adjust a search query. Thus, the combination of Hattori, Schuetze, and Cruz teaches all the elements of the claims of the claimed invention.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dangelino N. Gortayo whose telephone number is (571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dangelino N. Gortayo
Examiner

DL

Tim Vo
SPE

Tim Vo

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100